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EXAMINER

YANG, JAMES J

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/589,992	Applicant(s) SATO ET AL.	
	Examiner JAMES YANG	Art Unit 2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/18/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-41 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-41 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :08/18/2006
05/19/2008 09/04/2008 10/06/2009 09/16/2010.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "the screen" in Line 7. There is insufficient antecedent basis for this limitation in the claim.

Claim 38 recites the limitation "the display of video" in Line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-5, 17-19, 23-25, and 30-32 are rejected under 35 U.S.C. 102(b) as being anticipated by Bichot et al. (WO 00/76130 A1).

Claim 1, Bichot teaches:

A remote control system in which a remote commander is used to operate one or more devices to be controlled (Bichot, Page 5, Lines 4-7),

wherein the remote commander and at least some of the devices to be controlled are provided with a network communication function (Bichot, Page 5, Lines 4-7, The devices and the terminal communicate through the Internet (see Bichot, Page 5, Lines 22-25).), **and a device to be controlled is operated by means of a command through a network in response to a user input on the remote commander** (Bichot, Page 8, Lines 10-19).

Claim 2, Bichot further teaches:

The device to be controlled returns a response through the network in response to a command transmitted by the remote commander through the network (Bichot, Page 8, Lines 10-19).

Claim 3, Bichot further teaches:

The remote commander submits a request for data to the device to be controlled (Bichot, Page 8, Lines 10-14), **and the device to be controlled returns the requested data through the network** (Bichot, Page 8, Lines 14-19).

Claim 4, Bichot further teaches:

The remote commander plays back and outputs the data received from the device to be controlled (Bichot, Page 8, Lines 17-23).

Claim 5, Bichot further teaches:

The device to be controlled converts the data requested from the remote commander into a format that can be played back and output by the remote commander (Bichot, Page 7, Lines 11-22, The home access device stores the HTML page sets of each device such that the user can see status information on a display (see Bichot, Page 8, Lines 10-19).), **and returns the converted data through the network** (Bichot, Page 7, Lines 11-22).

Claim 17, Bichot further teaches:

The remote commander submits a request for device information to the devices to be controlled having the network communication function through the network (Bichot, Page 8, Lines 10-16), **and displays a device list concerning a device to be controlled that has responded with device information in response to the request** (Bichot, Page 8, Lines 17-26).

Claim 18, Bichot further teaches:

The remote commander displays a device to be controlled that responded with device information in the past and that does not respond at present in a grayed-out manner on the device list, or deletes a device to be controlled that has not responded with device information for a certain period of time or more from the device list (Bichot, Page 7, Lines 5-6, When a device is removed from the home

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network, the device will not respond with device information for a certain period of time or more. It is noted that the interpretation of the remote commander is defined as the display device 9 and the home access device 7 together (see Fig. 4). Also, the term device list is a list of page sets stored in the home access device (see Bichot, Col. 7, Lines 11-15).).

Claim 19, Bichot further teaches:

The remote commander transmits an operation request to a device to be controlled selected on the device list (Bichot, Page 8, Lines 28-33 and Page 9, Lines 8-11).

Claim 23, Bichot teaches:

A remote commander for remotely operating one or more devices to be controlled (Bichot, Page 5, Lines 4-7), **comprising:**

a network communication unit that performs a communication operation through a network (Bichot, Fig. 4, Page 5, Line 5, The display terminal/PC communicates with the devices through the Internet, and thus has a network communication unit.);

a user input unit that receives an instruction input from a user (Bichot, Page 8, Lines 1-4 and 10-16, The user makes a selection at the display terminal/PC. It is noted that because the display terminal is a PC and the user can make a selection, the display terminal/PC has a user input unit.); **and**

a data processing unit that processes data to be transmitted to and received from a device to be controlled through the network according to the instruction input from the user via the user input unit (Bichot, Page 8, Lines 10-16, The display terminal/PC has a processing unit that processes a user input and allows the terminal/PC to transmit a command to the home access server based on the user input.).

Claim 24, Bichot further teaches:

The data processing unit processes transmission of a command to and reception of a response from a device to be controlled through the network (Bichot, Page 8, Lines 10-22, The display terminal/PC transmits a command based on a user input and then receives and displays corresponding status information from a device.).

Claim 25, Bichot further teaches:

A data playback-output unit that decodes data received through the network to play back and output the data (Bichot, Page 8, Lines 17-26, The display terminal/PC will display the results of a status signal as well as a list of functions sent back from the home access server.).

Claim 30, Bichot further teaches:

A request for device information is submitted to devices to be controlled having a network communication function through the network (Bichot, Page 8, Lines 1-16); **and**

the data playback-output unit displays a device list concerning a device to be controlled that has responded with device information in response to the request (Bichot, Page 8, Lines 17-26).

Claim 31, Bichot further teaches:

A device to be controlled that responded with device information in the past and that does not respond at present is displayed in a grayed-out manner on the device list, or a device to be controlled that has not responded with device information for a certain period of time or more is deleted from the device list (Bichot, Page 7, Lines 5-6, When a device is removed from the home network, the device will not respond with device information for a certain period of time or more. It is noted that the interpretation of the remote commander is defined as the display device 9 and the home access device 7 together (see Fig. 4). Also, the term device list is a list of page sets stored in the home access device (see Bichot, Col. 7, Lines 11-15).).

Claim 32, Bichot further teaches:

An operation request is transmitted to a device to be controlled selected on the device list (Bichot, Page 8, Lines 28-33 and Page 9, Lines 8-11).

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2. Claims 34-35, and 41 are rejected under 35 U.S.C. 102(b) as being anticipated by Neuman (U.S. 2003/0195969).

Claim 34, Neuman teaches:

A remote control server operating in a communication environment where a remote commander operates one or more devices to be controlled through a network (Neuman, Paragraph [0021], Central settop box 102 is a remote control server.), **comprising:**

a network communication unit that performs a communication operation through the network (Neuman, Paragraph [0021], Network interface 103 performs communication over the network 111 between the remote settop box 101 and central settop box 102.); **and**

a protocol conversion unit that converts a command received through the network into an infrared command (Neuman, Paragraphs [0021] and [0048], IR packet decoder 104 translates packetized IR commands to IR blaster 106.), **wherein an operation command for an IR device that can be remotely controlled only by means of infrared communication is received from the remote commander through the network** (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024]). The IR signal is transmitted to a VCR, for example, which is activated using IR signals (see Neuman, Paragraph

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[0009]), and is converted into an infrared command to transfer the infrared command to the IR device (Neuman, Paragraph [0047]).

Claim 35, Neuman further teaches:

A codec processing unit that encodes data into a format that can be played back and output on the remote commander, wherein data requested by the remote commander to the IR device is extracted from the IR device and is converted into a format that can be played back and output by the remote commander, and the converted data is returned to the remote commander through the network (Neuman, Paragraphs [0008-0009], A MPEG encoder is a codec processing unit that encodes the analog signal from the VCR to a format that can be played back and output on the remote settop box. This digitized and compressed analog signal is data requested and is converted to a format that can be played back and output by the remote settop box. Furthermore, the signal is transmitted over the home network to the remote settop box.).

Claim 41, Neuman further teaches:

Information on IR devices to which the infrared command can be transmitted is registered (Neuman, Paragraph [0025], Possible transmission schemes for devices is stored in the ROM, and they are chosen until one scheme is successful.), **and IR device information is returned to the remote commander in response to a request from the remote commander** (Neuman, Paragraphs [0009] and [0021]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 6-7, 15, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bichot et al. (WO 00/76130 A1) in view of Neuman (U.S. 2003/0195969).

Claim 6, Bichot does not teach:

The device to be controlled includes an IR device that can be remotely controlled only by means of infrared communication, and a remote control server having a network communication function and a protocol conversion function of converting a command received through the network into an infrared command; and

the remote control server receives an operation command for the IR device from the remote commander through the network, converts the operation command into an infrared command, and transfers the infrared command to the IR device.

Neuman teaches:

The device to be controlled includes an IR device that can be remotely controlled only by means of infrared communication (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024])). The IR signal is transmitted to a VCR, for example, which is activated using IR signals (see Neuman, Paragraph [0009]).), **and a remote control server having a network communication function** (Neuman, Paragraph [0021], Network interface 103 performs communication over the network 111 between the remote settop box 101 and central settop box 102.) **and a protocol conversion function of converting a command received through the network into an infrared command** (Neuman, Paragraphs [0021] and [0048], IR packet decoder 104 translates packetized IR commands to IR blaster 106.); **and**

the remote control server receives an operation command for the IR device from the remote commander through the network (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024])).), **converts the operation command into an infrared command** (Neuman, Paragraphs [0021] and [0048], IR packet decoder 104 translates packetized IR commands to IR blaster 106.), **and transfers the infrared command to the IR device** (Neuman, Paragraph [0047]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as

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taught by Neuman by integrating the teaching of infrared remote control as taught by Neuman.

The motivation would be to increase the range of a remote controller by allowing control of IR devices from different rooms (see Neuman, Paragraphs [0009-0010]). See also Paragraphs [0056-0060].

Claim 7, Bichot in view of Neuman further teaches:

The remote control server extracts from the IR device the data requested by the remote commander to the IR device (Neuman, Fig. 1, Paragraph [0009]), and converts the extracted data into a format that can be played back and output by the remote commander to return the converted data to the remote commander through the network (Neuman, Fig. 1, Paragraph [0009], As seen in Fig. 1, the format is an MPEG format.).

Claim 15, Bichot in view of Neuman further teaches:

Upon receiving a video content request from the remote commander through the network (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024]). Because the user wishes to access video from the VCR, one of the possible signals is a video content request signal (see Neuman, Paragraph [0009]).), the remote control server converts the video content request into an infrared command (Neuman, Paragraphs [0048] and

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[0051]), **and transmits the video content request via infrared light to an IR recording device that can be remotely controlled only by means of infrared communication** (Neuman, Paragraphs [0047] and [0052], An example of an IR recording device is VCR (see Fig. 1: 107, Paragraph [0021]), which is well-known to be a recording device.);

the IR recording device outputs video content according to the infrared command from the remote control server (Neuman, Paragraph [0009]); **and**

the remote control server converts the video content output from the IR recording device into a format that can be played back and output by the remote commander (Neuman, Paragraphs [0008-0009]), **and distributes the converted video content to the remote commander via streaming through the network** (Neuman, Paragraphs [0008-0009], Because normal VCR operations are given to the remote settop box, the user is able to play, pause, fast forward, rewind, and other features known in the art (see for example, Bichot, Fig. 2), and thus the video can be streamed.);

Claim 21, Bichot in view of Neuman teaches:

The remote control server registers therein information on IR devices to which the infrared command can be transmitted (Bichot, Page 7, Lines 11-22, Wherein the combination of Bichot in view of Neuman teaches that some of these devices are IR devices, such as a VCR (see Neuman, Fig. 1: 107).), **and returns IR**

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device information to the remote commander in response to a request from the remote commander (Bichot, Page 8, Lines 10-23); and

the remote commander displays an IR device list (Bichot, Page 8, Lines 17-26, The HTML script of a specific device on the network and the multiple options of controlling it is interpreted as an IR device list, the VCR being the IR device.).

Claim 22, Bichot in view of Neuman teaches:

The remote commander transmits an operation request for an IR device selected on the IR device list to the remote control server through the network (Bichot, Page 8, Lines 10-16); and

the remote control server converts the operation request for the IR device from the remote commander into an infrared command (Neuman, Paragraph [0021]), and transfers the converted infrared command to the IR device (Neuman, Paragraphs [0021] and [0047]).

4. Claims 8-12, 14, 16, and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bichot et al. (WO 00/76130 A1) in view of Berezowski et al. (WO 00/04709 A1).

Claim 8, Bichot teaches:

The device to be controlled returns the status through the network in response to an status request from the remote commander (Bichot, Page 8, Lines 10-23); **and**

the remote commander displays and outputs received status (Bichot, Page 8, Lines 17-26).

Bichot does not specifically teach:

The device to be controlled stores EPG data.

Berezowski teaches:

The device to be controlled stores EPG data (Berezowski, Page 29, Lines 3-17 and Page 31, Lines 10-16, The device to be controlled is the program guide equipment, which includes user television equipment (see Fig. 6a for example).).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as taught by Bichot by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32). Furthermore, television program guides are well-known in the art to be an example of a home A/V device controllable over an Internet connection (see Berezowski, Fig. 1, Page 22, Lines 14-22).

Claim 9, Bichot in view of Berezowski further teaches:

The remote commander transmits a channel change request to a television receiver serving as a device to be controlled in response to designation of a channel on a current EPG data display view (Berezowski, Page 45, Lines 6-13).

Claim 10, Bichot in view of Berezowski further teaches:

The device to be controlled converts video content received on the channel specified in the change request given by the remote commander into a format that can be played back and output by the remote commander (Berezowski, Page 40, Lines 6-20 and Page 43, Lines 27-31), and distributes the converted video content via streaming through the network (Berezowski, Page 42, Lines 26-32 and Page 43, Lines 27-30, The video and audio that is accessed by the program guide access device is either being locally distributed or is a recording previously stored. The video and audio that is also be locally accessed is thus being streamed at the program guide access device.); and

the remote commander decodes the video content received (Berezowski, Page 43, Lines 32-33), and displays video (Berezowski, Page 43, Lines 13-20).

Claim 11, Bichot in view of Berezowski further teaches:

The television receiver serving as the device to be controlled changes the display of the video to the channel specified in the change request given by the remote commander (Berezowski, Page 45, Lines 6-13, It is well-known in the art that

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changing the channel on a television set will change the display to that specific channel.).

Claim 12, Bichot in view of Berezowski further teaches:

In response to designation of a program on a future EPG data display view, the remote commander transmits a request for setting a reservation to record the program to a recording device serving as a device to be controlled (Berezowski, Page 39, Lines 20-33, The user selects which programs to be recorded based on the program listing on the user interface.).

Claim 14, Bichot does not teach:

In response to a request for video content from the remote commander, a recording device serving as the device to be controlled converts the requested video content into a format that can be played back and output by the remote commander, and distributes the converted video content via streaming through the network; and

the remote commander decodes the video content received, and displays video.

Berezowski teaches:

In response to a request for video content from the remote commander (Berezowski, Page 42, Lines 26-33 through Page 43, Lines 1-8), **a recording device serving as the device to be controlled converts the requested video content into a**

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format that can be played back and output by the remote commander (Berezowski, Page 43, Lines 27-33), **and distributes the converted video content via streaming through the network** (Berezowski, Page 42, Lines 26-32 and Page 43, Lines 27-30, The video and audio that is accessed by the program guide access device is either being locally distributed or is a recording previously stored. The video and audio that is also be locally accessed is thus being streamed at the program guide access device.); **and**

the remote commander decodes the video content received (Berezowski, Page 43, Lines 32-33), **and displays video** (Berezowski, Page 43, Lines 13-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as taught by Bichot by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32). Furthermore, television program guides are well-known in the art to be an example of a home A/V device controllable over an Internet connection (see Berezowski, Fig. 1, Page 22, Lines 14-22).

Claim 16, Bichot in view of Berezowski further teaches:

The remote commander requests a display device serving as the device to be controlled to change the display of the video to video content currently being displayed on the remote commander (Berezowski, Page 45, Lines 6-13, The remote

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access program guide may change the channel on a television such that the video on the television matches the video content, i.e. the selected setting on the user interface.);

and

the display device changes the screen to the video output from the recording device in response to the request to change the display of the video

(Bichot, Page 8, Lines 24-26, The user may cause the VCR to perform the Play function.).

Claim 26, Bichot does not teach:

The data playback-output unit displays and outputs received EPG data.

Berezowski teaches:

The data playback-output unit displays and outputs received EPG data

(Berezowski, Page 30, Lines 16-32).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as taught by Bichot by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32). Furthermore, television program guides are well-known in the art to be an example of a home A/V device controllable over an Internet connection (see Berezowski, Fig. 1, Page 22, Lines 14-22).

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Claim 27, Bichot in view of Berezowski further teaches:

A channel change request is transmitted to a television receiver serving as a device to be controlled in response to designation of a channel on a current EPG data display view (Berezowski, Page 45, Lines 6-13).

Claim 28, Bichot does not teach:

The data playback-output unit decodes received video content, and displays video.

Berezowski teaches:

The data playback-output unit decodes received video content (Berezowski, Page 43, Lines 32-33), **and displays video** (Berezowski, Page 43, Lines 13-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as taught by Bichot by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32). Furthermore, television program guides are well-known in the art to be an example of a home A/V device controllable over an Internet connection (see Berezowski, Fig. 1, Page 22, Lines 14-22).

Claim 29, Bichot in view of Berezowski further teaches:

In response to designation of a program on a future EPG data display view (Berezowski, Page 39, Lines 20-23), **a request for setting a reservation to record the program is transmitted to a recording device serving as a device to be controlled** (Berezowski, Page 39, Lines 20-33).

5. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bichot et al. (WO 00/76130 A1) in view of Neuman (U.S. 2003/0195969), and further in view of Berezowski et al. (WO 00/04709 A1).

Claim 13, Bichot in view of Neuman teaches:

Upon receiving a request from the remote commander through the network (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024]).), **the remote control server converts the request into infrared data** (Neuman, Paragraphs [0048] and [0051]), **and transmits the request via infrared light to an IR recording device that can be remotely controlled only by means of infrared communication** (Neuman, Paragraphs [0047] and [0052], An example of an IR recording device is VCR (see Fig. 1: 107, Paragraph [0021]), which is well-known to be a recording device.); **and the IR recording device operates according to the infrared data from the remote control server** (Neuman, Paragraph [0009]), **and commanding a VCR to record** (Bichot, Page 9, Lines 1-6).

Bichot in view of Neuman does not specifically teach:

Upon receiving a recording reservation request from the remote commander through the network, the remote control server converts the recording reservation request into infrared reservation data based on EPG data, and transmits the recording reservation request to an IR recording device; and the IR recording device sets a recording reservation according to the infrared reservation data from the remote control server.

Berezowski teaches:

Upon receiving a recording reservation request from the remote commander through the network (Berezowski, Page 39, Lines 27-33), the remote control server converts the recording reservation request into infrared reservation data based on EPG data (Berezowski, Page 16, Lines 20-33, The command from the remote program guide access device may command a VCR, or secondary storage, to record a program (see Berezowski, Page 40, Lines 1-3). The command to record on the secondary storage is based on EPG data (see Berezowski, Page 39, Lines 20-26).), and transmits the recording reservation request to an IR recording device (Berezowski, Page 39, Lines 27-33 through Page 40, Lines 1-3); and the IR recording device sets a recording reservation according to the infrared reservation data from the remote control server (Berezowski, Page 16, Lines 20-33, and Page 39, Lines 27-33 through Page 40, Lines 1-3, The VCR stores the program based on the user input and the signal transmitted to the VCR.).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the method and device for controlling a home network as taught by Bichot in view of Neuman by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32). Furthermore, television program guides are well-known in the art to be an example of a home A/V device controllable over an Internet connection (see Berezowski, Fig. 1, Page 22, Lines 14-22).

6. Claims 20 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bichot et al. (WO 00/76130 A1) in view of Davis et al. (U.S. 5,687,334).

Claims 20 and 33, Bichot does not teach:

When the device to be controlled displayed in a grayed-out manner on the device list is selected, the remote commander transmits an operation request after submitting a request for turning on the device to be controlled.

Davis teaches:

When the device to be controlled displayed on the device list is selected, the remote commander transmits an operation request (Davis, Col. 8, Lines 49-65, The sub-menus allow for the user to operate different devices (see Davis, Col. 7, Lines 21-40).) **after submitting a request for turning on the device to be controlled** (Davis, Col. 8, Lines 38-45).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the device for controlling a home network as taught by Bichot by integrating the teaching of an on/off toggle and submenu as taught by Davis.

The motivation would be to provide a comprehensive, streamlined, consistent, and coherent user interface to operate system components (Davis, Col. 9, Lines 15-20).

Bichot in view of Davis does not specifically teach:

Displaying the devices in a grayed-out manner.

However, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the checkbox of devices by changing the color of the icons of devices that are off to gray as a matter of design choice such that the user can still recognize when a device is off. It is noted that selected items are also highlighted (see Davis, Col. 5, Lines 31-34). One of ordinary skill in the art at the time of the invention would recognize that adding the feature of graying-out items that are turned off does not render the invention inoperable for its intended purpose and would yield predictable results.

7. Claims 36-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neuman (U.S. 2003/0195969) in view of Berezowski et al. (WO 00/04709 A1).

Claim 36, Neuman teaches:

The remote control server is connected to a receiver (Neuman, Fig. 1: 102-104);

Neuman does not teach:

The remote control server is connected to a television receiver or is integrally formed with a television receiver;

an EPG storage unit that stores EPG data separated from a received broadcast wave is provided; and

the EPG data is returned through the network in response to an EPG data request from the remote commander.

Berezowski teaches:

The remote control server is connected to a television receiver or is integrally formed with a television receiver (Berezowski, Fig. 2a-2b: 17);

an EPG storage unit that stores EPG data (Berezowski, Page 11, Lines 1-14) separated from a received broadcast wave is provided (Berezowski, Page 9, Lines 15-23); and

the EPG data is returned through the network in response to an EPG data request from the remote commander (Berezowski, Page 31, Lines 7-16).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system and method for remote control over a network as taught by Neuman by integrating the teaching of controlling an interactive program guide equipment as taught by Berezowski.

The motivation would be to allow access to a user's in home program guide remotely (see Berezowski, Page 4, Lines 1-5 and 24-32), which would add greater functionality to the VCR in Neuman. Furthermore, television program guides are well-

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known in the art to be an example of a home A/V IR device controllable over an Internet connection (see Berezowski, Fig. 1, Page 16, Lines 26-31 and Page 22, Lines 14-22).

Claim 37, Neuman in view of Berezowski further teaches:

Video content received on a channel specified in a change request given by the remote commander is converted into a format that can be played back and output by the remote commander (Berezowski, Page 40, Lines 6-20 and Page 43, Lines 27-31), **and the converted video content is distributed via streaming through the network** (Berezowski, Page 42, Lines 26-32 and Page 43, Lines 27-30, The video and audio that is accessed by the program guide access device is either being locally distributed or is a recording previously stored. The video and audio that is also be locally accessed is thus being streamed at the program guide access device.).

Claim 38, Neuman in view of Berezowski further teaches:

The display of video is changed to a channel specified in a change request given by the remote commander (Berezowski, Page 45, Lines 6-13, The display of video occurs at the television equipment 22. It is well-known in the art that if a channel on a television is changed, then the display of video will change too.).

Claim 39, Neuman in view of Berezowski further teaches:

When a recording reservation request is received from the remote commander through the network (Berezowski, Page 39, Lines 27-33), **the recording**

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reservation request is converted into infrared reservation data on the basis of the EPG data (Berezowski, Page 16, Lines 20-33, The command from the remote program guide access device may command a VCR, or secondary storage, to record a program (see Berezowski, Page 40, Lines 1-3). The command to record on the secondary storage is based on EPG data (see Berezowski, Page 39, Lines 20-26).), **and the recording reservation request is transmitted via infrared light to an IR recording device that can be remotely controlled only by means of infrared communication** (Neuman, Paragraphs [0047] and [0052], An example of an IR recording device is VCR (see Fig. 1: 107, Paragraph [0021]), which is well-known to be a recording device. In the combination of Neuman in view of Berezowski, the recording reservation request performed in Berezowski is transmitted via the IR method as taught by Neuman (see also Berezowski, Page 16, Lines 26-31).).

Claim 40, Neuman in view of Berezowski further teaches:

When a video content request is received from the remote commander through the network (Neuman, Paragraph [0021], IR packet decoder 104 translates packetized IR commands to IR blaster 106. The original IR packets are sent from the remote settop box (see Neuman, Paragraphs [0023-0024]). Because the user wishes to access video from the VCR, one of the possible signals is a video content request signal (see Neuman, Paragraph [0009]).), **the video content request is converted into an infrared command** (Neuman, Paragraphs [0048] and [0051]), **and the video content request is transmitted via infrared light to an IR recording device that can**

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be remotely controlled only by means of infrared communication (Neuman, Paragraphs [0047] and [0052], An example of an IR recording device is VCR (see Fig. 1: 107, Paragraph [0021]), which is well-known to be a recording device.); **and**
video content output from the IR recording device is converted into a
format that can be played back and output by the remote commander (Neuman, Paragraphs [0008-0009]), **and the converted video content is distributed via**
streaming to the remote commander through the network (Neuman, Paragraphs [0008-0009], Because normal VCR operations are given to the remote settop box, the user is able to play, pause, fast forward, rewind, and other features known in the art (see for example, Bichot, Fig. 2), and thus the video can be streamed.).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES YANG whose telephone number is (571)270-5170. The examiner can normally be reached on M-F 8:30-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Zimmerman can be reached on 571-272-3059. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/J.Y./

/Brian A Zimmerman/
Supervisory Patent Examiner, Art Unit 2612